UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,338	09/11/2003	Morio Nagata	2565-0274P	7095

2292 7590 12/19/2006		EXAMINER
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FALLS CHURCH, VA 22040-0747	ART UNIT	PAPER NUMBER
	2192	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/19/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/659,338	NAGATA ET AL.
	Examiner	Art Unit	
	Chrystine Pham	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date 2/14/04 ; 6/24/04 ; 4/22/04

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

This action is responsive to application 10/659338 filed on September 11, 2003. Claims

1-16 are presented for examination. Priority date September 25, 2002 has been

considered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 9 is rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter.

Claim 9

Merely claimed as "A transformation program ...", it is limited to computer listings *per*

se, i.e., the descriptions or expressions of the programs, and is not a physical "thing".

As claimed, the "transformation program" is neither a computer component nor statutory

process, as it is not "acts" being performed. Such claimed computer program does not

define any structural and functional interrelationships between the program and other

claimed elements of a computer which permit the computer program's functionality to be

realized. In contrast, a claimed computer-readable medium encoded with a computer

program is a computer element which defines structural and functional interrelationships

between the computer program and the rest of the computer which permit the computer

program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-

84, 32 USPQ2d at 1035. See MPEP 2106.01 [R-5] (I)

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form

the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8-16 rejected under 35 U.S.C. 102(e) as being anticipated by Dupuy et al.

(US 6,523,171 B1, "Dupuy").

Claim 1

Dupuy teaches a transformation apparatus comprising:

a memory unit for storing a program for batch processing in a form of source code (see

at least *160* FIG.1 & associated text);

a section judging unit for dividing the source code of the program stored in the memory

unit into at least one block of process, each block of process being identified as a

section, and judging a role of the section as semantic information of each section (see

at least col.2:30-55); and

an extracting/transforming unit for extracting transformation information for source code

transformation from the source code of the program stored in the memory unit based on

the semantic information of each section judged by the section judging unit (see at least

col.2:30-55), and transforming the source code of the program into source code of a

transformation result program including the source code of a transformation result

program for a client (see at least *stub class* col.4:25-52) and the source code of the

transformation result program for a server (see at least *skeleton classes* col.4:25-52)

based on the transformation information extracted (see at least *130, 180* FIG.1 &

associated text; *230* FIG.2 & associated text).

Claim 2

The rejection of base claim 1 is incorporated. Dupuy further teaches wherein the

extracting/transforming unit transforms the source codes of the two transformation result

programs into source codes of an object-oriented program (see at least *130, 180* FIG.1

& associated text; col.2:30-55).

Claim 3

The rejection of base claim 2 is incorporated. Dupuy further teaches wherein the

extracting/transforming unit creates plural templates of the object-oriented program,

which correspond to plural classes having a predetermined data structure and

procedure, extracts plural pieces of information including the predetermined data

structure and procedure from the source codes of the two transformation result

programs, and transforms the source codes of the two transformation result programs

into the source codes of plural object-oriented programs by applying each of the plural

pieces of information extracted to a corresponding part of the plural templates (see at

least *object-oriented classes* col.2:30-55).

Claim 4

Dupuy teaches a transformation apparatus comprising:

a memory unit for storing a program for batch processing in a form of source code (see

at least *160* FIG.1 & associated text);

a section judging unit for dividing the source code of the program stored in the memory

unit into at least one block of process, each block of process being identified as a

section, and judging a role of each section as semantic information of each section (see

at least *100, 110, 120* FIG.1 & associated text; col.2:35-45), and

wherein the transformation apparatus creates plural templates of object-oriented

programs, which correspond to plural classes, each of which having a predetermined

data structure and procedure, extracts plural pieces information including the

predetermined data structure and procedure from the source code of the program for

batch processing stored in the memory unit based on the semantic information of each

section judged by the section judging unit, and transforms the source code of the

program stored in the memory unit by applying each of the plural pieces of information

extracted to a corresponding part of the plural templates (see at least col.2:30-55).

Claim 5,

Claim recites limitations, which have been addressed in claim 1, therefore, is rejected

for the same reasons as cited in claim 1.

Claim 6

The rejection of base claim 1 is incorporated. Dupuy further teaches a syntax analyzing

unit for analyzing syntax of the program stored in the memory unit (see at least

syntactical analysis col.2:4-30; *105* FIG.1 & associated text), and wherein the section

judging unit judges the semantic information of each section included in the program,

the syntax of which is analyzed by the syntax analyzing unit (see at least col.3:10-35;

110 FIG.1 & associated text).

Claims 8-11

Claims recite limitations, which have been addressed in claim 1, therefore, are rejected

for the same reasons as cited in claim 1.

Claim 12

The rejection of base claim 11 is incorporated. Dupuy further teaches wherein:

the first transformation unit inputs the program source code for the off-line batch

processing, naming rules of data, and coding rules of procedures and transforms the

program source code into two kinds of class programs including a client side class and

a server side class for the on-line real-time processing (see at least *105, 110* FIG.1 &

associated text; *stub, skeleton* col.4:25-52; *230* FIG.2 & associated text); and

the second transformation unit inputs the two kinds of class programs and generates

source program of an object-oriented program (see at least col.2:30-55).

Claim 13

The rejection of base claim 12 is incorporated. Dupuy further teaches wherein the

second transformation unit transforms the client side class into three kinds of class

programs including a model class, a view class, and a controller class (see at least

Interface, GUI, Event FIG.2 & associated text)and transforms the server side class into

two kinds of class programs including a session class and an entity class (see at least

skeleton, Imp FIG.2 & associated text).

Claim 14

The rejection of base claim 12 is incorporated. Dupuy further teaches wherein the first

transformation unit includes preprocessing of meaning assignment for referring to

definition of data in the source code of the program, judging definition of a master file

and definition of a transaction file, detecting a role of the program and roles of

components of the program among a series of processes, and appending labels which

show the roles of the program and the roles of the components of the program among a

series of processes (see at least *105, 110* FIG.1 & associated text; col.2:30-55).

Claims 15-16

Claims recite limitations, which have been addressed in claim 1, therefore, are rejected

for the same reasons as cited in claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dupuy in view of

Bahrs et al. (US 6,002,874).

Claim 7

The rejection of base claim 1 is incorporated. Dupuy does not expressly disclose

wherein the source code is a COBOL program. However, Bahrs teaches a method of

transforming procedural source code into object-oriented source code (see at least

Abstract; FIG.4 & associated text) wherein the procedural source code is a COBOL

program source code (see at least col.1:49-col.2:7). Dupuy and Bahrs are analogous

art because they are both directed to converting procedural source code into object-

oriented source code. It would have been obvious to one of ordinary skill in the

pertinent art at the time the invention was made to incorporate the teaching of Bahrs

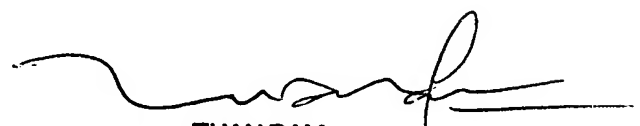into that of Dupuy for the inclusion of transforming Cobol source code into object

oriented source code. And the motivation for doing so would have been to improve data processing efficiencies and productivity of the code users (see at least Bahrs col.2:8-20).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chrystine Pham whose telephone number is 571-272-3702. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TUAN DAM
SUPERVISORY PATENT EXAMINER